

10/527265

PCP T/USC 3/22226

FIGURE 1.

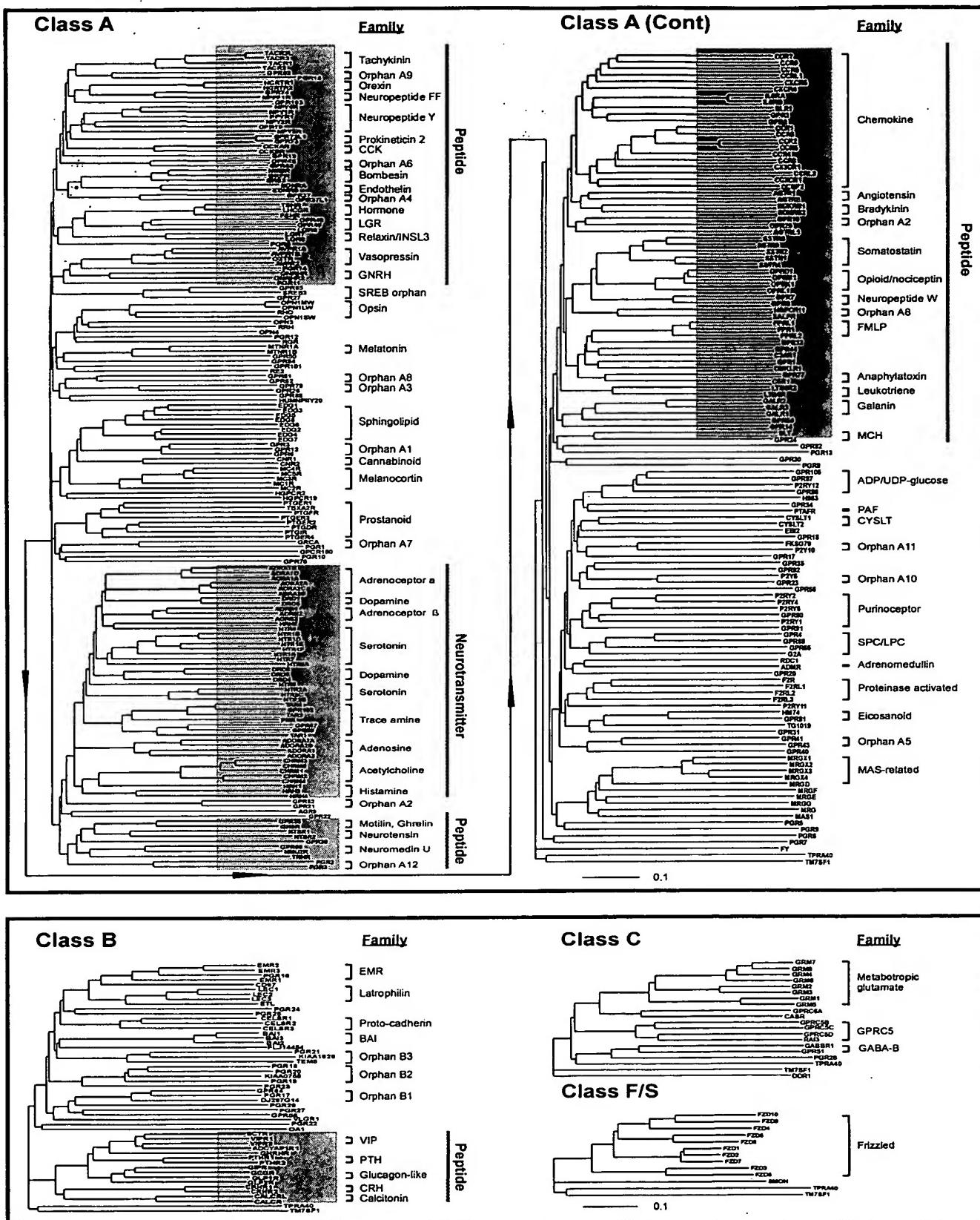
esoGPCR Genes

Class A				Class A				Class A				Class A				Class B			
Family	Gene	Database ID	Species	Family	Gene	Database ID	Species	Family	Gene	Database ID	Species	Family	Gene	Database ID	Species	Family	Gene	Database ID	Species
Acetylcholine (muscarinic)	CHRM1	#1	H.M	Histamine	HRH1	867	H.M	Prostanoid	PTGDR	#172	H.M	Orphan group A6	*GPR45	#259	H.M	Panthyroid hormone	PTHR1	#340	H.M
	CHRM2	2	H.M		HRH2	88	H.M		PTGDR1	173	H.M		*GPR83	260	H.M		PTHR2	341	H.M
	CHRM3	3	H.M		HRH3	88	H.M		PTGDR2	174	H.M		*GCR1	260	H.M	Secretin	SCR	342	H.M
	CHRM4	4	H.M		HRH4	82	H.M		PTGDR3	175	H.M		*GPR1	261	H.M	PACAP	ADCYAP1R1	343	H.M
	CHRM5	5	H.M	Hormone protein	FGR	91	H.M		PTGDR4	176	H.M		*GPR11	262	H.M	Vasoactive	VIP1	344	H.M
Adenosine	ADORA1	6	H.M		UHR	82	H.M		PTGDR	178	H.M		*GALPR	263	H.M	Intracellular	VIP2	345	H.M
	ADORA2A	7	H.M		TSHR	83	H.M		PTGDR	179	H.M		*GPR90	265	M	Brain-specific	BA11	346	H.J
	ADORA2B	12	H.M	KISS-1	GPR54	84	H.M		PTGDR	178	H.M		*GPR12	266	H.M	angiogenesis inhibitor	BA12	347	H.J
	ADORA3	8	H.M	Leukotriene	LTB4R	85	H.M		PTGDR	179	H.M		*GPR13	267	H.M	BA13	348	H.J	
ADP/UDP-glucose	P2RY12	10	H.M		LTB4R2	86	H.M		P2RY1	180	H.M		DAF	C097	349	H.M			
	GPR105	11	H.M	MAS-related gene	MRCX1	87	H		P2RY2	181	H.M		EGF-Ba, mucin-	EGR1	350	H.M			
	GPR85	12	H.M		MRCO2	88	H		P2RY4	182	H.M		Ba receptor (EMR)	EGR2	351	H.M			
	GPR157	13	H.M		MRCO3	89	H		P2RY5	183	H.M		EGR3	352	H.J				
Adrenoceptor	ADRA1A	14	H.M		MRCO4	100	H		P2RY11	184	H.M		EGR16	353	H.M				
	ADRA1B	15	H.M		MRCO5	101	H.M		Retinal	RGR	187	H.M	Latrophilin	LEC1	354	H.M			
	ADRA1D	18	H.M		MmpA1	102	M		Serotonin	HTTR1A	188	H.M	LEC2	355	H.M				
	ADRA2A	17	H.M		MmpA2	103	M		HTTR1B	189	H.M	LEC3	356	H.J					
	ADRA2B	19	H.M		MmpA3	104	M		HTTR1D	190	H.M	GPCR150	GPR1	357	H.M				
	ADRA2C	20	H.M		MmpA4	105	M		HTTR1E	191	H.M	GPCR15	GPR15	358	H.M				
	ADRB1	20	H.M		MmpA5	106	M		HTTR1F	192	H.M	GPCR17	GPR17	359	H.M				
	ADRB2	21	H.M		MmpA6	107	M		HTTR2A	193	H.M	GPCR18	GPR18	360	H.M				
	ADRB3	22	H.M		MmpA7	108	M		HTTR2B	194	H.M	GPCR19	GPR19	361	H.M				
Adrenomedullin	ADMTR	23	H.M		MmpA8	109	M		HTTR2C	195	H.M	GPCR20	GPR20	362	H.M				
	CMR1	24	H.M		MmpA9	110	M		HTTR4	196	H.M	GPCR22	GPR22	363	H.M				
	CMR2	25	H.M		MmpA10	111	M		HTR5A	197	H.M	GPCR25	GPR25	364	H.M				
	GPR77	28	H.M		MmpA11	112	M		HTR5B	198	M	GPCR30	GPR30	365	H.M				
Angiotensin	AGTR1	27	H.M		MmpA12	113	M		HTR6	199	H.M	GPCR31	GPR31	366	H.M				
	AGTR2	28	H.M		MmpA13	114	M		HTR7	200	H.M	GPCR32	GPR32	367	H.M				
Apef1	AGTR1L1	28	H.M		MmpA14	115	M		Somatostatin	SSTR1	201	H.M	GPCR33	GPR33	368	H.M			
Bombesin	BRS3	30	H.M		MmpA15	116	M		SSTR2	202	H.M	GPCR34	GPR34	369	H.M				
	GPR3	31	H.M		MmpA16	117	M		SSTR3	203	H.M	GPCR35	GPR35	370	H.M				
	NMBR	32	H.M		MmpA19	118	M		SSTR4	204	H.M	GPCR36	GPR36	371	H.M				
Bradykinin	BOKR1	33	H.M		MmpB1	119	M		SSTR5	205	H.M	GPCR37	GPR37	372	H.M				
	BOKR2	34	H.M		MmpB2	120	M		SPC/LPC	G2A	206	H.M	GPCR40	GPR40	373	H.M			
Cannabinoid	CNR1	35	H.M		MmpB3	121	M		GPR4	207	H.M	GPCR44	GPR44	374	H.M				
	CNR2	36	H.M		MmpB4	122	M		GPR63	208	H.M	GPCR55	GPR55	375	H.M				
Chemokine	CCR1	37	H.M		MmpB5	123	M		GPR68	209	H.M	GPCR81	GPR81	376	H.M				
	CCR2	38	H.M		MmpB6	124	M		Spingolipid	EDG1	210	H.M	GPCR62	GPR62	377	H.M			
	CCR3	39	H.M		MmpB8	125	M		EDG2	211	H.M	GPCR75	GPR75	378	H.M				
	CCR4	40	H.M		MmpB10	126	M		EDG3	212	H.M	GPCR80	GPR80	379	H.M				
	CCR5	41	H.M		MmpB11	127	M		EDG4	213	H.M	GPCR82	GPR82	380	H.M				
	CCR6	42	H.M		MmpB13	128	M		EDG5	214	H.M	GPCR83	GPR83	381	H.M				
	CCR7	43	H.M		Melanin-concentrating hormone	GPR24	129	H.M		EDG6	215	H.M	GPCR84	GPR84	382	H.M			
	CCR8	44	H.M		SLC1	130	H		Tachykinin	TACR1	216	H.M	GPCR86	GPR86	383	H.M			
	CCR9	45	H.M		MCR1	131	H.M		TACR2	217	H.M	GPCR101	GPR101	384	H.M				
	CCR11	47	H.M		MCR2	132	H.M		TACR3	220	H.M	GPCR105	GPR105	385	H.M				
	CCR12	48	H		MCR3	133	H.M		TRH	TRH8	221	H.M	GPCR106	GPR106	386	H.M			
	CCBP2	49	H		MCR4	134	H.M		TRH8	TRH2	222	M	GPCR107	GPR107	387	H.M			
	*CMXR1L1	50	M		MCR5	135	H.M		Trace amine	*GPR57	223	H.M	Metabotropic glutamate	GABAR	388	H.M			
	*CMXR1L2	51	M		MTR1A	136	H.M		*GPR58	224	H.M	GABA-B	GABAB1	389	H.M				
	CCXR1	52	H.M		MTR1B	137	H.M		*PMR1	225	H.M	GABA-B	GABAB2	390	H.M				
	CCXR1	53	H.M		MTR2	138	H.M		PMR1	226	H.M	GPCRSB	GPRCSB	391	H.M				
	IL1RA	54	H.M		MTR3	139	H.M		PMR2	227	H.M	GPRSC	GPRSC	392	H.M				
	IL8R	55	H.M		MTR4	140	H.M		PMR3	228	H.M	GPRCD	GPRCD	393	H.M				
	GPR3	56	H.M		MTR5	141	H.M		PMR4	229	H.M	TAU1	TAU1	394	H.M				
	CXCR4	57	H.M		MTR6	142	H.M		PMR5	230	H.M	Metabotropic glutamate	GRM1	395	H.M				
	BRL1	58	H.M		MTR7	143	H.M		PMR6	231	H.M	GRM2	GRM2	396	H.M				
	CXCR5	59	H.M		MTR8	144	H.M		PMR7	232	H.M	GRM3	GRM3	397	H.M				
	FY	60	H.M		MTR9	145	H		PMR8	233	H.M	GRM4	GRM4	398	H.M				
	CCKAR	61	H.M		MTR10	146	H.M		PMR9	234	H.M	GRM5	GRM5	399	H.M				
	Cysteinyl leukotriene	CYSLT1	62	H.M	MTR11	147	H.M		PMR10	235	H.M	GRM6	GRM6	400	H.M				
	CYSLT2	63	H.M		MTR12	148	H.M		PMR11	236	H.M	GRM7	GRM7	401	H.M				
Dopamine	DRD1	64	H.M		MTR13	149	H.M		PMR12	237	H.M	GRM8	GRM8	402	H.M				
	DRD2	65	H.M		MTR14	150	H.M		PMR13	238	H.M	GRM9	GRM9	403	H.M				
	DRD3	66	H.M		MTR15	151	H.M		PMR14	239	H.M	GRM10	GRM10	404	H.M				
	DRD4	67	H.M		MTR16	152	H.M		PMR15	240	H.M	GRM11	GRM11	405	H.M				
	DRD5	68	H.M		MTR17	153	H.M		PMR16	241	H.M	GRM12	GRM12	406	H.M				
Duffy	FY	69	H.M		MTR18	154	H.M		PMR17	242	H.M	GRM13	GRM13	407	H				
	TG1019	70	H		MTR19	155	H.M		PMR18	243	H.M	Smoothed	SMOH	408	H.M				
	*MR74	71	H.M		MTR20	156	H.M		PMR19	244	H.M	No class							
	LDHRA	72	H.M		MTR21	157	H.M		PMR20	245	H.M								
	EDB1	73	H.M		MTR22	158	H.M		PMR21	246	H.M								
	FPR1	74	H.M		MTR23	159	H.M		PMR22	247	H.M								
	FPR1	75	H.M		MTR24	160	H.M		PMR23	248	H.M								
	FPR2	76	H.M		MTR25	161	H.M		PMR24	249	H.M								
	FPR2	77	H.M		MTR26	162	H.M		PMR25	250	H.M								
	FPR-R1	78	H.M		MTR27	163	H.M		PMR26	251	H.M								
	FPR-R1	79	H.M		MTR28	164	H.M		PMR27	252	H.M								
	FPR-R1	80	M		MTR29	165	H.M		PMR28	253	H.M								
	FPR-R2	81	M		MTR30	166	H.M		PMR29	254	H.M								
	GALR1	82	H.M		MTR31	167	H.M		PMR30	255	H.M								
	GALR2	83	H.M		MTR32	168	H.M		PMR31	256	H.M								
	GALR3	84	H.M		MTR33	169	H.M		PMR32	257	H.M								
	GALR4	85	H.M		MTR34	170	H.M		PMR33	258	H.M								
	GALR5	86	H		MTR35	171	H.M		PMR34	259	H.M								
	GPR4R	87	H.M		MTR36	172	H.M		PMR35	260	H.M								
	GPR4R2	88	H.M		MTR37	173	H.M		PMR36	261	H.M								
	GPR4R2	89	H.M		MTR38	174	H.M		PMR37	262	H.M								
	GPR4R2	90	H.M		MTR39	175	H.M		PMR38	263	H.M								
	GPR4R2	91	H.M		MTR40	176	H.M		PMR39	264	H.M								
	GPR4R2	92	H.M		MTR41	177	H.M		PMR40	265	H.M								
	GPR4R2	93	H.M		MTR42	178	H.M		PMR41	266	H.M								
	GPR4R2	94	H.M		MTR43	179	H.M		PMR42	267	H.M								
	GPR4R2	95	H.M		MTR44	180	H.M		PMR43	268	H.M								

FIGURE 2

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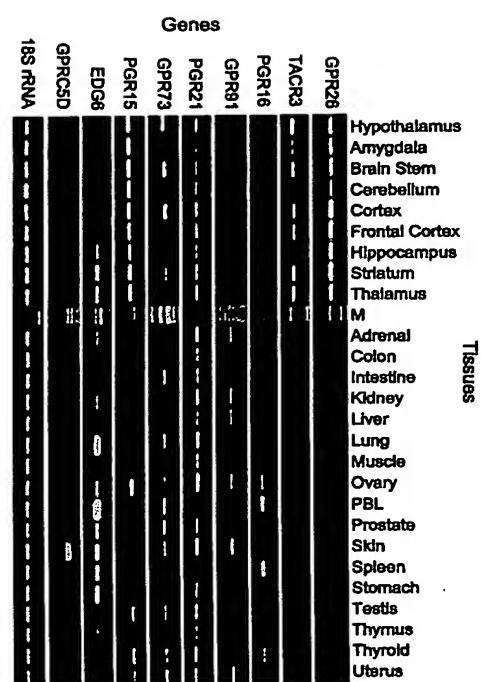
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FIGURE 3.



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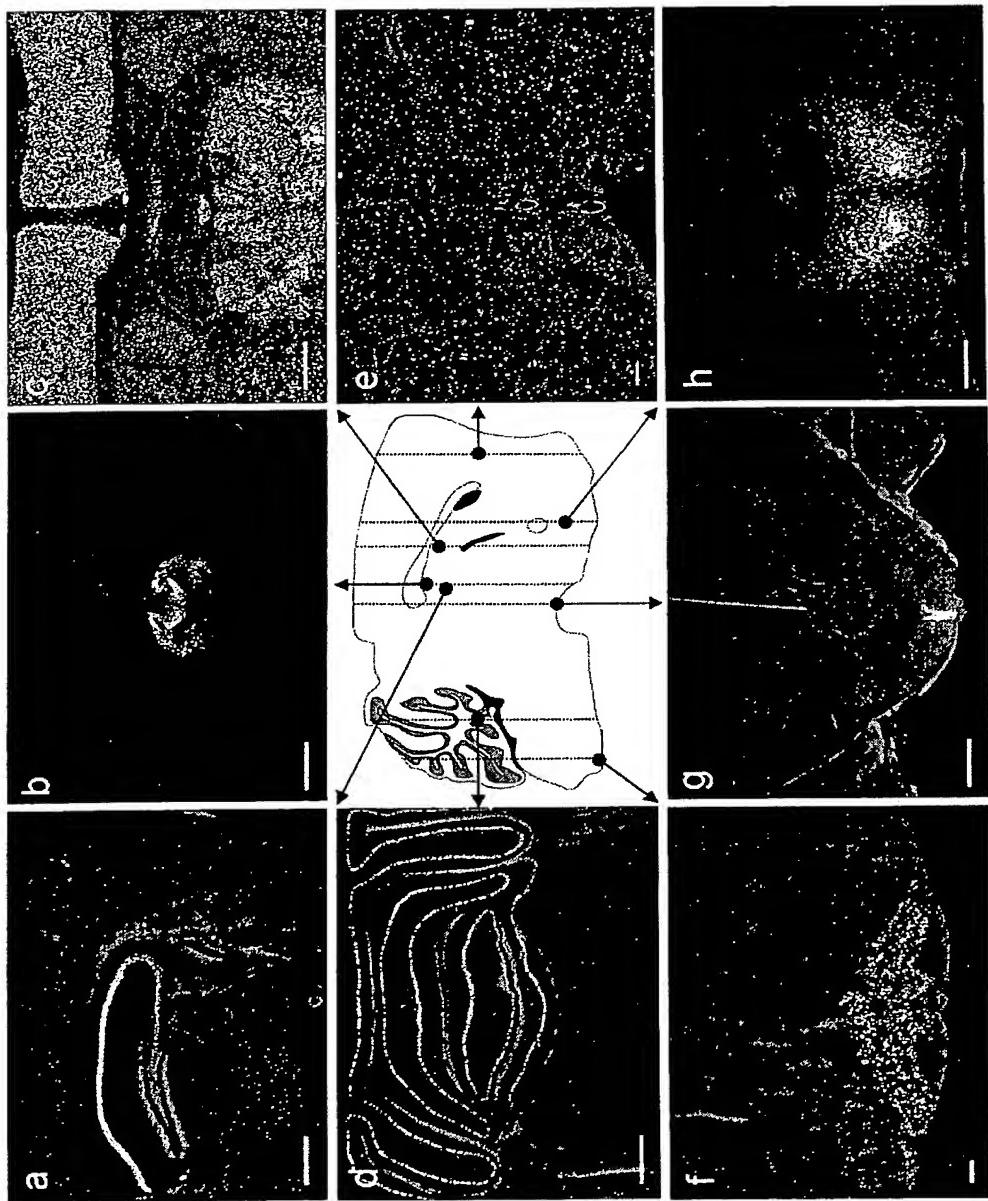
FIGURE 4.

Tissues	Genes
Hypothalamus Amygdala Brain Stem Cerebellum Cortex Frontal Cortex Hippocampus Striatum Thalamus Adrenal Colon Intestine Kidney Liver Lung Muscle Ovary PBL Prostate Skin Spleen Stomach Testis Thymus Thyroid Uterus	MRGG GPR91 GPRC5D HM74 CSTL2 PGR117 GPR9 IL8RA CCR3 P2Y10 EDG7 ACTRL1 EDG8 GPR101 GPR88 SREB3 GALR2 GPR9 TACR3 BA11 NTSR1 GPR85 GPR12 HRR43 HRR43L1 GPR26 HTR7 HTR1F GPR17 GPR77 GPR65 GPR63 HTR2A PGR7 CELSR2 CELSR3 GPR88 PGR14 PGR19 PGR15 HTR4 GPR37 RE2 RE3 LEC1 LEC2 P2RY12 GPR19 EDG8 GPR23 GPR28 HTR1D TRHR2 GPR4 TM7SF3 PGR23 GPR105 GPR97 CMKLR1 KIAA0758 PGR22 TM7SF1 GPR22 GPR40 P2Y5 RDC1 GPR73 GPR80 CCBP2 CCKR6 CCR11 GPR48 GPR21 MRGF GPR43 H963 GPR82 CSTL1 CSTL TEM5 GPR82 CXCR6 GPR18 GPR84 VPR2 PGR98 GPR55 EMR1 GPRC5C FKSG79 HGPCR11 LGR29 LGR6 PTGDR GPR31 FPR-RS2 GPR35 PGR10 HCRT1 SSTR3
	1
	2
	3

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FIGURE 5.



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STUDY 3.8 GPR85

FIGURE 6A.

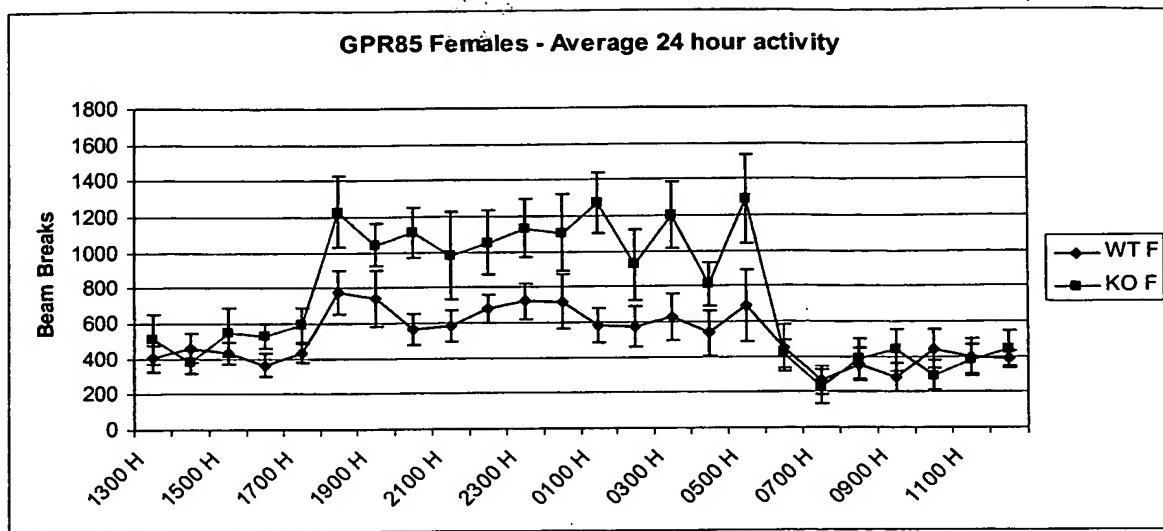
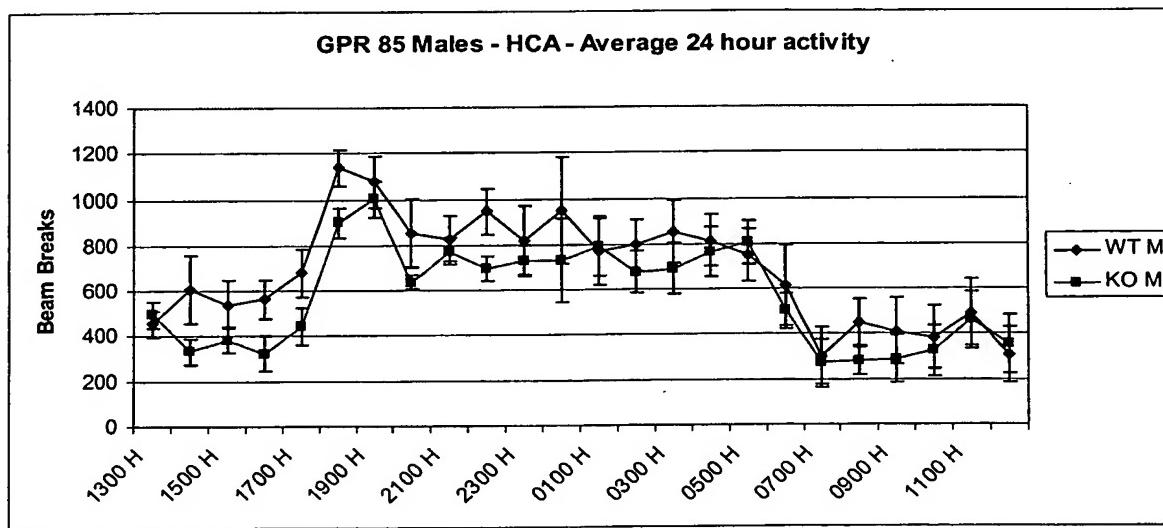


FIGURE 6B.



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FIGURE 7A.

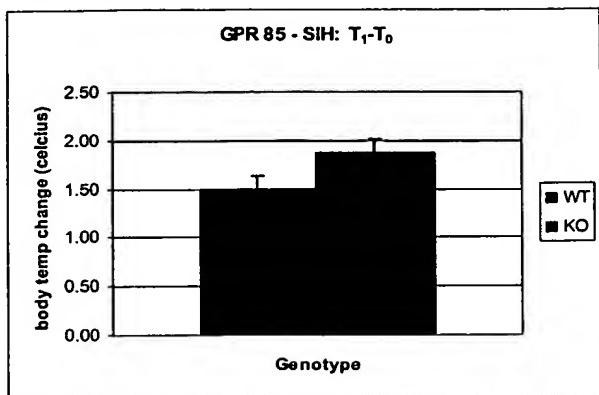
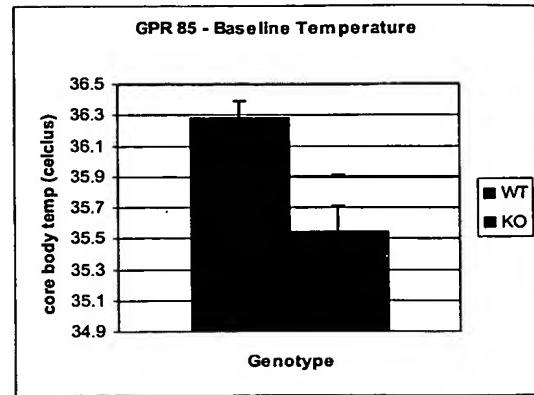


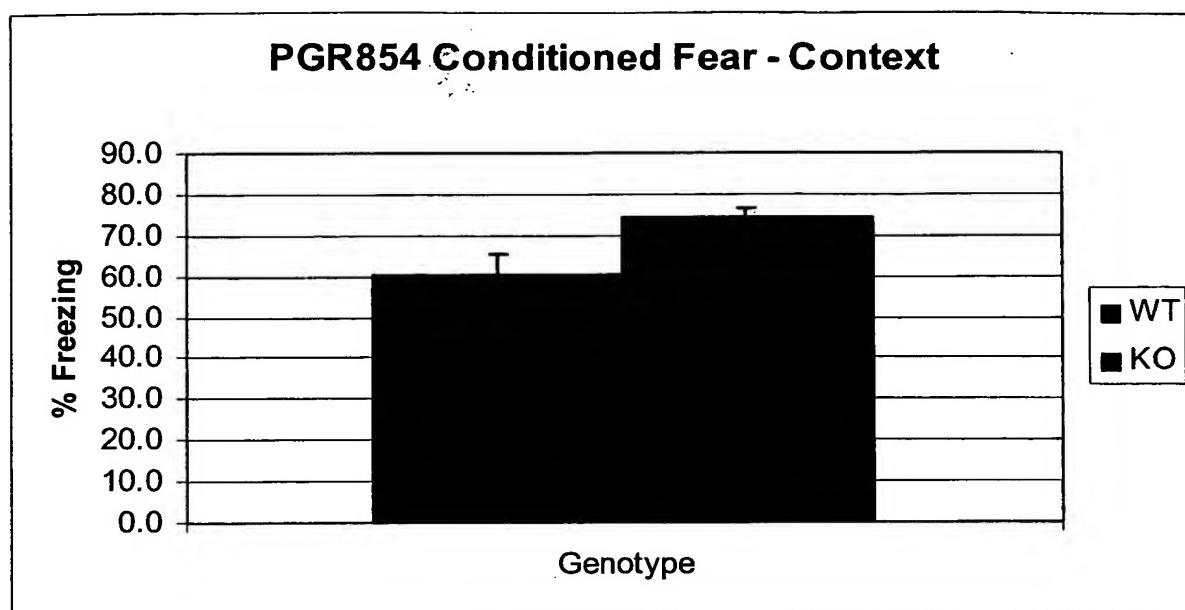
FIGURE 7B.



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FIGURE 8.



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FIGURE 9A.

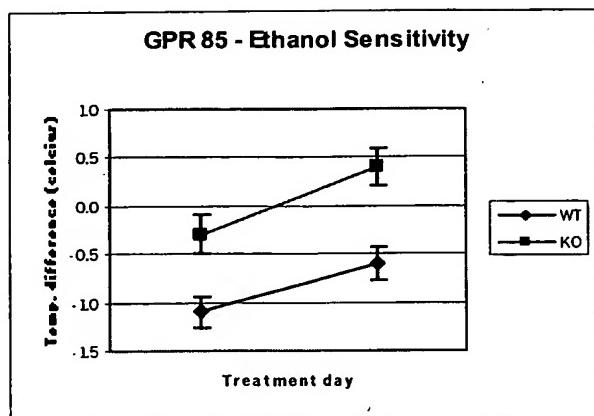
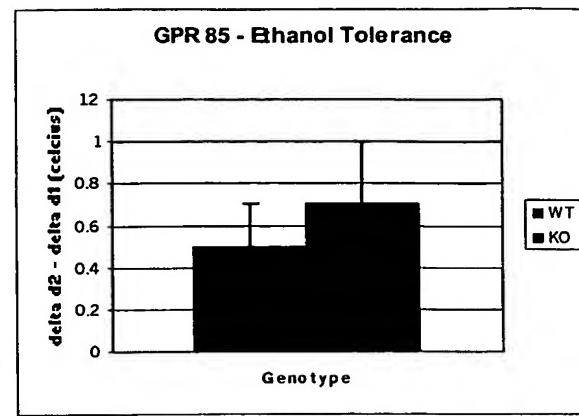


FIGURE 9B.



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